

Fig. 1

T03280 * 252241560

HUMAN: 1 CAGACATCTGTCTCCCCCTCAAAAGTCATCCTGCCCGGGAGCCCTGGCTGGTGCACA
CHIMPANZEE: Q T S V P K L P R G S V Q V T
TGAGGACCTCTGTGACCAGGCCAAGTTGTTGGCATAGAGACCCGGTTGCCCTAAAAG
TGAGGACCTCTGTGACCAGGCCAAGTTGTTGGCATAGAGACCCGGTTGCCCTAAAAG
C S T S C D Q P D L G I E T P L P K K
HUMAN: 121 GAGTTGCTCCTGGAAACCAACCGGAAGGTGTATGAACTGAGCAATGTGCAAGAACAT
CHIMPANZEE: E L G N W K V Y E L S N V Q E D
AGCCAACCAATTGCTTAAACTGCCCTGTGATGGGCAGTCACAGCTAAACAGCTAAACCTCCTC
AGCCAACCAATTGCTTAAACTGCCCTGTGATGGGCAGTCACAGCTAAACCTCCTC
S Q P M C Y S N C P D G Q S T A K T F L
HUMAN: 241 ACCGTGTACTGGACTCCAGAACGGGTGGAACCTGGCACCCCTCCCGAGCCAGTG
CHIMPANZEE: T V W T P E R V E L A P L P S W Q P V
GGCAAGAACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCT
GGCAAGAACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCT
G K D L T R C Q V E G G A P R A N L T
HUMAN: 361 GTGGTGTCTGCCCTGGAGAAGGAGCTGAAACGGGAGCCAGCTGGGGAGCCGGCT
CHIMPANZEE: V V L R G E K E L K R E P A V G E P A
GAGGTACGGACCCAGGTGCTGGTGAAGGAGAGATCACCATGGAGCCAATTCTCGTGC CGC
GAGGTACGGACCCAGGTGCTGGTGAAGGAGAGATCACCATGGAGCCAATTCTCGTGC CGC
E V T T V L V E R D H H G A N F S C R

FIG. 2

卷之三

| | | | |
|-------------|---------|--|-------------------|
| HUMAN: | 481 | ACTGAACTGGACCTGGGGCCCCAAGGGCTGGAGCTGTGTTGAGAACACCTCGGCCCCCTAC | |
| CHIMPANZEE: | | ACTGAACTGGACCTGGGGCCCCAAGGGCTGGAGCTGTGTTGAGAACACCTCGGCCCCCTAC | |
| | T E L D | P Q G L Q | F E N T S A P H |
| HUMAN: | 601 | CAGCTCCAGACCTTGTCCCTGCCAGGGACTCCCCCACAACTTGTCAAGCCCCGGGTCCCTA | |
| CHIMPANZEE: | | CAGCTCCAGACCTTGTCCCTGCCAGGGACTCCCCCACAACTTGTCAAGCCCCGGGTCCCTA | |
| | V D E | T P A T F V L Q | R V L P Q L |
| HUMAN: | 661 | GAGGTGGACACGGCAGGGGACCCGTGGTCTGGTCCCAGTCTCGGAG | |
| CHIMPANZEE: | | GAGGTGGACACGGCAGGGGACCGTGGTCTGGTCCCAGTCTCGGAG | |
| | V D E | T P A T F V L Q | P V L F P V L E |
| HUMAN: | 721 | GCCCAGGGTCCACCTGGCACTGGGGACCAGAGGGTTGAACCCCCACAGTCACCTATGGCAAC | |
| CHIMPANZEE: | | GCCCAGGGTCCACCTGGCACTGGGGACCAGAGGGTTGAACCCCCACAGTCACCTATGGCAAC | |
| | A Q V H | L A L G D Q R | N P T V T Y G N |
| HUMAN: | 841 | CTGACAGTGTGCAGTAATACTGGGAACCAGAGCCAGGGACACTGCAGACAGTGACCATC | |
| CHIMPANZEE: | | CTGACAGTGTGCAGTAATACTGGGAACCAGAGCCAGGGACACTGCAGACAGTGACCATC | |
| | D S F | S A K A S V T | E D E G T Q R |
| HUMAN: | 841 | TACAGCTTCCGGCCCCAACGTTGATTCTGACCCAAGCCAGGGTCTCAGAACGGGACCCGAG | |
| CHIMPANZEE: | | TACAGCTTCCGGCCCCAACGTTGATTCTGACCCAAGCCAGGGTCTCAGAACGGGACCCGAG | |
| | V S F | T P A N V I L | E G T E G T Q T E |
| HUMAN: | 841 | GTGACAGTGAAGTGTGAGGGCCACCCCTAGAGCCAAGGTGACCCATGGGGTTCCAGCC | |
| CHIMPANZEE: | | GTGACAGTGAAGTGTGAGGGCCACCCCTAGAGCCAAGGTGACCCATGGGGTTCCAGCC | |
| | V T | K C E A H | P R A K V G N P A |

FIG. 2 (CONT.).

He was a man of great energy and determination, and he left a lasting legacy in the field of education.

| | | | |
|-------------|---|--|--|
| HUMAN: | 961 | CAGCCACTGGCCCCGAGGGCCCAGCTGCTGAAGGCCACCCAGAGGACAACGGGCC | |
| CHIMPANZEE: | | CAGCCAGTGGGAGGTCCTGAAACCCCTGGAGGTGGGCCAGCTTATACACAAGAACCC | |
| | Q P V | R V Q L L K A T P E D N G R | |
| | | | |
| HUMAN: | 1081 | CGGGAGGCTTCCGTGTCCTGTAATGGCCCCGACTGGACCGAGAGGGATTGTCCGGAAACTGG | |
| CHIMPANZEE: | | CGGGAGGCTTCGTGTCCTGTAATGGCCCCGACTGGAGGGATTGTCCGGAAACTGG | |
| | R E L R V L Y G P R L D E R D C P G N W | | |
| | | | |
| HUMAN: | 1201 | GAGCTCAAGTGTCTAAAGGATGGCACTTCCCACACTGCCCATCGGGAAATCAGTGACTGTC | |
| CHIMPANZEE: | | GAGCTCAAGTGTCTAAAGGATGGCACTTCCCACACTGCCCATCGGGAAATCAGTGACTGTC | |
| | E L K C L K D G T F P L P V G E S V T V | | |
| | | | |
| HUMAN: | 1321 | CGCGAGGTGACCCGTCTGGGACCTAACCTACCTCTGTGGGCCAGGGACTCAAGGGGAGGTCA | |
| CHIMPANZEE: | | CGCAAGGTGACCGTCTGGGCCAGGGACTCAAGGGGAGGTCA | |
| | R K V T N V L S P R Y E I T V V | | |
| | | | |

FIG. 2 (CONT.).

102230 " 22224660

| | | |
|-------------|---------------------------------------|---|
| HUMAN: | 1441 | AAGATCAAGAAATACAGACTACAACAGGGCCAAAAGGGACCCCATTGAAACCGAACACA |
| CHIMPANZEE: | | AAGATCAGGAATACAGACTACAACAGGCTCAAAGGGACCCATTGAAACCGAACACA |
| | K I R K Y R L Q Q Q A G T P M K P N T | |
| | CAAGCCACGCCCTCCCTGA | |
| | CAAGCCA CGCC TCC TGA | |
| | Q A T P ^ ^ ^ | |

FIG. 2 (CONT.)

TCGAGCTTGTGATGGCGTCCACGATCCTG

1515 ICAM GORILLA
CAG ACA TCT GTG TCC CCC CCA AAA GTC ATC CTG CCC CGG GGA GGC TCC GTG CTG GTG ACA
TGC AGC ACC TCC TGT GAC CAG CCC ACC TTG TTG GGC ATA GAG ACC CCT TTG CCT AAA AAG
GAG TTG CTC CTG CTT GGG AAC AAC CAG AAG GTG TAT GAA CTG AGC AAT GTG CAA GAA GAT
AGC CAA CCA ATG TGT TAT TCA AAC TGC CCT GAT GGG CAG TCA ACA GCT AAA ACC TTC CTC
ACC GTG TAC TGG ACT CCA GAA CGG GTG GAA CTG GCA CCC CTC CCC TCT TGG CAG CCA GTG
GCC AAG GAC CTT ACC CTA CGC TGC CAG GTG GAG GAG GAG CTC AAA CGG GAG CCA GCT GGG GAG
GTG GTG CTG CTC CGT GGG GAG GAG GAG CTC AAA CGG GAG CCA GCT GGG GAG CCC GGC
GAG GTC ACG ACC ACG GTG CCG GTG GAG AAA GAT CAC CAT GGA GCC ATT TTC TTG TGC CGC
ACT GAA CTG GAC CTG CGG CCC CAA GGG CTG AAG CTC TTT GAG AAC ACC TCG GCC CCC TAC
CAG CTC CAA ACC TTT GTC CTG CCA CGG ACT CCC CCA CAA CTG GTC AGC CCT CGG GTC CTA
GAG GTG GAC ACG CAG CGG ACT GTG GTC TGT TCC CTG GAC GGG CTG TTC CCA GTC TCG GAG
GCC CAG GTC CAC CTG GCA CTG CGG GAC CAG AGG TTG AAC CCC ACA GTC ACC ATT GGC AAC
GAC TCC TTC TCA GCC AAG GCC TCA GTC AGT GTG ACC GCA GAG GGC ACC CAG TGG
CTG ACG TGT GCA GTA ATA CTG GGG ACC CAG AGC CAG GAG ACA CTG CAG ACA GTC AGC ACC
TAC AGC TTT CCG GCA CCC AAC GTG ATT CTG AGC AGG CCA GAG GTC TCA GAA GGG ACC
GTG ACA GTG AAG TGT GAG GCC CAC CCT AGA GCC AAG GTG AGC CTG ATT GGG GTC CTA
CAG CCA CCG GGC CCG AGG ACC CAG TTC CTG GAG GTG GCC CAG CTT ATA CAC AAG AAC CAG
AGC TTC TCC TGC TCT GCA ACC CTG GAG GGG AGG GAT TGT CCG GGA AAC TGG
CGG GAG CTT CGT GTC CTG TAT GGC CCC CGA CTG GAT GAG AGG GAT TGT CCG GGA AAC
ACG TGG CCA GAA AAT TCC CAG ACT CCA ATG TGC CAG CCT TGG GGG AAC CCA TTG CCC
GAG CTC AAG TGT CTA AAG GAT GGC ACT TTC CCA CTG CCC GTC GGG GAA TCA GTG ACT GTC
ACT CGA GAT CTT GAG GGC ACC TAC CTC TGT CGG AGC ACT CAA GGG GAG GTC ACC
CGC GAG GTG ACC GTG ATT GTG CTC TCC CCC CGG TAT GAG TTT GTC ATC ATC GCT GTG GTA
GCA GCC GCA GTC ATA ATG GGC ACT GCA GGG CTC AGC TAC CTC TAT AAC CGC CAG CGG
AAG ATC AGG AAA TAC AGA CTA CAA CAG GCT CAA AAA GGG ACC CCC ATG AAA CGG AAC ACA
CAA GCC ACG CCT CCC

(SEQ ID NO: 4)

Fig. 3

T D 3 2 2 0 0 2 2 5 2 4 5 5 0

1515 ICAM ORANG
CAC ACA TCT GTG TCC TCC GCC AAC GTC TTC CTG CCC CGG GGA GGC TCC GTG CTA GTG AAT
TGC AGC ACC TCC TGT GAC CAG CCC ACC TTG TTG GGC ATA GAG ACC CCG TTG CCT AAA AAG
GAG TTG CTC CCG GGT GGG AAC AAC TGG AAG ATG TAT GAA CTG AGC AAT GTG CAA GAA GAT
AGC CAA CCA ATG TGC TAT TCA AAC TGC CCT GAT GGG CAG TCA GCA GCT AAA ACC TTC CTC
ACC GTG TAC TGG ACT CCA GAA CGG GTG GAA CTG CCC CTC CCC TCT TGG CAG CCA GTG
GGC AAG AAC CTT ACC CTA CGC TGC CAG GTG GAG GGT GGG GCA CCC CGG GCC AAC CTC ACC
GTG GTA TTG CTC CGT GGG GAG GAG GAG GTC AGC CGG CAG CCA GCG GTG GGG GAG CCC GCC
GAG GTC ACG GCC ACG GTG CTG GCG AGG AAA GAT GAC CAC GGA GCC AAT TTC TCG TGC CGC
ACT GAA CTG GAC CTG CGG CCC CAA CGG CTG GAG CTG TTT GAG AAC ACC TCG GCC CCC CAC
CAG CTC CAA ACC TTT GTC CTG CCA CGG ACT CCC CCA CAA CTT GTC AGC CCC CGG GTC CTA
GAG GTG GAC ACG CAG GGG ACC GTG GTC TGT TCC CTG GAC GGG CTG TTC CCA GTC TCG TCG GAG
GCC CAG GTC CAC TTG GCA CTG GGG GAC CAG AGG TTG AAC CCC ACA GTC ACC TCG ACC TAT
GAC TCC CTC TCG GCC AAG GCC TCA GTC AGT GTG ACC GCA GAG GAG GGC ACC CAG TGG
CTG TGG TGT GCA GTG ATA CTG AGG AAC CAG AGC CAG GAG ACA CGG CAG ACA GTG ACC ATC
TAC AGC TTT CCT GCA CCC AAC GTG ACT CTG ATG AAG CCA GAG GTC TCA GAA GGG ACC GAG
GTG ATA GTG AAG TGT GAG GCC CAC CCT GCA GCC AAC GTG ACG CTG ATT GGG GTT CCA GCC
CAG CCG CCG GGC CCG AGG GCC CAG TTC CTG AAG GCC ACC CCA GAG GAC AAC GGG CGC
AGC TTC TCC TGC TCT GCA ACC CTG GAG GTG GCC CAG CTT ATA CAC AAG AAC CAG ACC
CGG GAG CTT CGA GTC CTG TAT GGC CCC CGA CTG GAC AGG GAT TGT CCG GGA AAC TGG
ACG TGG CCA GAA AAC TCC CAG ACT CCA ATG TGC CAG GCT TGG GGG AAC CCC TTG CCC
GAG CTC AAG TGT CTA AAG GAT GGC ACT TTC CCA CTG CCC ATC GGG GAA TCA GTG ACT GTC
ACT CGA GAT CTT GAG GGC ACC TAC CTC TGT CGG GCC AGG ACT CAA GGG ACT CAA GGG GAG GTC ACC
CGC GAG GTG ACC GTG AAT GTG CTC CCC CGG TAT GAG ATT GTC ATC ACT GTG GTA
GCA GCC GCA GCC ATA CTG GGC ACT GCA GGC CTC AGC TAC CTC TAT FAC CGC CAG CGG
AAG ATC AGG ATA TAC AGA CTA CAA CGT CAA AAA GGG ACC CCC ATG AAA CCA AAC ACA
CAA ACC ACG CCT CCC

(SEQ ID NO.5)

Fig. 4

卷之三

| | | QTSVSPSKV1 | LPRGGSVLVT | CSTSCDQPKL | LGIEETPLPKK | ELLPGNNRKK |
|---------|----------|-------------|------------|------------|-------------|------------|
| Human | J03132 | | | | | |
| Human | X06990 | | | | | |
| Human | X59286-8 | | | | | |
| Human | #4 | | | | | |
| Human | #7 | | | | | |
| Human | #8 | | | | | |
| Human | M24283 | | | | | |
| Human | U86814 | | | | M. | |
| Chimp | M86848 | P..... | Q..... | D..... | G..... | W..... |
| Chimp | #1 | P..... | Q..... | D..... | G..... | W..... |
| Gorilla | #1 | P..... | P..... | T..... | L..... | Q..... |
| Gorilla | #2 | P..... | P..... | T..... | L..... | Q..... |
| Orang | | H.....SAN.F | N..... | T..... | PG..... | W..... |

| | | VYELSNVQED | SQPMCYSNCP | DGQSTAKTFL | TVXYWTPERVE | LAPLPSWQPV |
|---------|----------|------------|------------|------------|-------------|------------|
| Human | J03132 | | | | | |
| Human | X06990 | | | | | |
| Human | X59286-8 | | | | | |
| Human | #4 | | | | | |
| Human | #7 | | | | | |
| Human | #8 | | | | | |
| Human | M24283 | | | | | |
| Human | U86814 | | | | | |
| Chimp | M86848 | | | | | |
| Chimp | #1 | | | | | |
| Gorilla | #1 | | | | | |
| Gorilla | #2 | | | | | |
| Orang | | | | | | |

| | (SEQ ID NC:6) |
|----------------|---------------|
| Human J03132 | GKNLTIRCQV |
| Human X06990 | EGGAPRANLT |
| Human X59286-8 | VULLRGEKEL |
| Human #4 | KREP AVG EPA |
| Human #7 | EVTITVLRR |
| Human #8 | ..... |

Fig. 5A

TP03220 "252241560

| | | | | | | | |
|----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Human M24283 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human U86814 | ?????????? | ??????????? | ??????????? | ??????????? | ??????????? | ??????????? | ??????????? |
| Human X06990 | ..D..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human X59286-8 | ..D..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human #4 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human #7 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human #8 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human M24283 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human U86814 | ??????????? | ??????????? | ??????????? | ??????????? | ??????????? | ??????????? | ??????????? |
| Chimp M86848 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Chimp #1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Gorilla #1 | ..... | ..... | I | E.. | ..... | ..... | ..... |
| Gorilla #2 | ..... | ..... | I | E.. | ..... | ..... | ..... |
| Orang | ..... | ..... | E.. | S..Q.. | ..... | ..... | A...A.K |
| | | | | | | | |
| Human J03132 | DHHGANFSCR | TELDLRFQGL | ELFENTSAFY | QLQTFLVLPAT | PPQLNSPRVL | | |
| Human X06990 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human X59286-8 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human #4 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human #7 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human #8 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human M24283 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human U86814 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Chimp M86848 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Chimp #1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Gorilla #1 | ..... | L.. | ..... | K.. | ..... | ..... | ..... |
| Gorilla #2 | ..... | L.. | ..... | K.. | ..... | ..... | ..... |
| Orang | ..... | D.. | ..... | H | ..... | ..... | ..... |
| | | | | | | | |
| Human J03132 | EVDTQGTWVC | SLDGGLFPVSE | AQVHLALGQ | RLNPTVTYGN | DSFSAKASVS | | |
| Human X06990 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human X59286-8 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human #4 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human #7 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human #8 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human M24283 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human U86814 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Chimp M86848 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Chimp #1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Gorilla #1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |

Fig. 5B

T 0 3 2 3 0 * 2 5 2 2 4 7 6 6 0

| | | | | | | |
|------------|-------|-------|-------|-------|-------|----------|
| Gorilla #2 | ..... | ..... | ..... | ..... | ..... | ..... |
| Orang | ..... | ..... | ..... | ..... | V | ..L..... |

| | | | | | | |
|----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Human J03132 | VTAEDEGTQR | LTCAVILGNQ | SQETLQTVTI | YSFPAPNVIL | TKPEVSEGT | ..... |
| Human X06990 | ..... | ..... | ..... | ..... | ..... | ..... |
| Human X59286-8 | ..... | ..... | ..... | ..... | ..... | ..... |
| Human #4 | ..... | ..... | ..... | ..... | ..... | ..... |
| Human #7 | ..... | ..... | ..... | ..... | ..... | ..... |
| Human #8 | ..... | ..... | ..... | ..... | ..... | ..... |
| Human M24283 | ..... | ..... | ..... | ..... | ..... | ..... |
| Human U86814 | ??????????? | ??????????? | ??????????? | ??????????? | ??????????? | ??????????? |
| Chimp M86848 | ..... | ..... | ..... | R. | ..... | ..... |
| Chimp #1 | ..... | ..... | ..... | R. | ..... | ..... |
| Gorilla #1 | ..... | W | ..... | T. | ..... | ..... |
| Gorilla #2 | ..... | W | ..... | T. | ..... | ..... |
| Orang | E.....W | W.....R. |R. |T. | M..... | ..... |

| | | | | | | |
|----------------|-------------|-------------|---------------|-------------|-------------|-------------|
| Human J03132 | VTVKCEAHPR | AKVTLNGVPA | QPLGPRAQLL | LKATPEDNGR | SFSCSATLEV | ..... |
| Human X06990 | ..... | ..... | ..... | ..... | ..... | ..... |
| Human X59286-8 | ..... | ..... | ..... | ..... | ..... | ..... |
| Human #4 | ..... | ..... | ..... | ..... | ..... | ..... |
| Human #7 | ..... | ..... | ..... | ..... | ..... | ..... |
| Human #8 | ..... | ..... | ..... | ..... | ..... | ..... |
| Human M24283 | ..... | ..... | ..... | ..... | ..... | ..... |
| Human U86814 | ??????????? | ??????????? | ??????????? | ??????????? | ??????????? | ??????????? |
| Chimp M86848 | ..... | ..... | ..... | V.....V... | ..... | ..... |
| Chimp #1 | ..... | ..... | ..... | V.....V... | ..... | ..... |
| Gorilla #1 | ..... | ..... | ..... | P.....T.F. | ..... | ..... |
| Gorilla #2 | ..... | ..... | ..... | P.....T.F. | ..... | ..... |
| Orang | I.....A | N.....P |P.....F. | ..... | ..... | ..... |

| | | | | | | |
|--------------|------------|-------------|------------|------------|------------|-------|
| Human J03132 | AGQLIHKNQT | RELRLVLYGPR | LDERDCPGNW | TWPENSQQTP | MCQAWGNPLP | ..... |
| Human X06990 | ..... | ..... | ..... | ..... | ..... | ..... |

Fig. 5C

卷之三

Fig. 5D

100 100 100 100 100 100 100 100 100 100

| | | | | |
|------------|---------|----------|-------|-----------|
| Gorilla #1 | Human | J03132 | QATPP | ..R..... |
| Gorilla #2 | Human | X06990 | ..... | ..R..... |
| Orang | Human | X59286-8 | ..... | ..RI..... |
| | Human | #4 | ..... | ..... |
| | Human | #7 | ..... | ..... |
| | Human | #8 | ..... | ..... |
| | Human | M24283 | ..... | ..... |
| | Human | U86814 | ????? | ..... |
| | Chimp | M86848 | ..... | ..... |
| | Chimp | #1 | ..... | ..... |
| | Gorilla | #1 | ..... | ..... |
| | Gorilla | #2 | ..... | ..... |
| | Orang |  |  | ..... |

Fig. 5E

DRAFT 2002-08-29

| | | | | | |
|--------------|------------|------------|------------|------------|-------------|
| Human M32331 | SDEKVFEVHV | RPKKLAVEPK | GSLEVNCSTT | CNQPEVGGLE | TSLDKILLDE |
| Human #4 | ..... | ..... | ..... | ..... | ..... |
| Human #8 | ..... | ..... | ..... | ..... | ..... |
| Human X15606 | ..... | ..... | ..... | ..... | N..... |
| Chimp #1 | ..... | ..... | K..... | ..... | ..... |
| Chimp #2 | ..... | ..... | K..... | ..... | ..... |
| Gorilla #2 | ..... | ..... | A..... | ..... | ..... |
| | | | | | |
| Human M32331 | QAQWKHYLVS | NISHDTVLQC | HFTCSGKQES | MNSNVSVYQP | PRQVILTLQP |
| Human #4 | ..... | ..... | ..... | ..... | ..... |
| Human #8 | ..... | ..... | ..... | ..... | ..... |
| Human X15606 | ..... | ..... | ..... | ..... | ..... |
| Chimp #1 | ..... | ..... | ..... | ..... | ..... |
| Chimp #2 | ..... | ..... | ..... | ..... | ..... |
| Gorilla #2 | ..... | ..... | ..... | ..... | ..... |
| | | | | | |
| Human M32331 | TLVAVGKSFT | IECRVPTVEP | LDSLTLFLFR | GNETLHYETF | GKAAPAPQEAE |
| Human #4 | ..... | ..... | ..... | ..... | ..... |
| Human #8 | ..... | ..... | ..... | ..... | ..... |
| Human X15606 | ..... | ..... | ..... | ..... | ..... |
| Chimp #1 | ..... | ..... | ..... | ..... | ..... |
| Chimp #2 | ..... | ..... | ..... | ..... | ..... |
| Gorilla #2 | ..... | ..... | ..... | NQ.. | L... |
| | | | | | |
| Human M32331 | TATFNSTADR | EDGHRNFSCS | AVLDLMSRGG | NIFHKHSAPK | MLEIYEPVSD |
| Human #4 | ..... | ..... | ..... | ..... | ..... |
| Human #8 | ..... | ..... | ..... | ..... | ..... |
| Human X15606 | ..... | ..... | ..... | ..... | ..... |
| Chimp #1 | .V..... | D..... | ..... | ..... | ..... |
| Chimp #2 | .V..... | D..... | ..... | ..... | ..... |
| Gorilla #2 | ..... | ..... | I.... | QE.... | ..... |

(SEQ ID NO:7)

Fig. 6A

| | | | | | |
|--------------|------------|------------|------------|------------|------------|
| Human M32331 | SQMVIIITVV | SVLLSLFVTS | VLLCFIFGQH | LRQQRMGTYG | VRAAWRRLPQ |
| Human #4 | ..... | ..... | ..... | ..... | ..... |
| Human #8 | ..... | ..... | ..... | ..... | ..... |
| Human X15606 | ..... | ..... | ..... | ..... | ..... |
| Chimp #1 | ..... | ..... | ..... | ..... | ..... |
| Chimp #2 | ..... | ..... | ..... | ..... | ..... |
| Gorilla #2 | ..... | ..... | ..... | ..... | ..... |

| | |
|--------------|------|
| Human M32331 | AFRP |
| Human #4 | .... |
| Human #8 | .... |
| Human X15606 | .... |
| Chimp #1 | .... |
| Chimp #2 | .... |
| Gorilla #2 | .... |

Fig. 6B

| | | | | | |
|--------------|------------|------------|------------|-------------|-------------|
| Human X69819 | QEFLLRVEPQ | NPVLSAGGSL | FVNCSTDAPS | SEKIALETS | SKELVASGMG |
| Human #4 | ..... | ..... | ..... | ..... | ..... |
| Human #5 | ..... | ..... | ..... | ..... | ..... |
| Human #7 | ..... | ..... | ..... | ..... | ..... |
| Human S50015 | ..... | ..... | ..... | F | ..... |
| Chimp #3 | ..... | ..... | ..... | ..... | ..... |
| Chimp #4 | ..... | ..... | ..... | ..... | ..... |
| Chimp #5 | ..... | ..... | ..... | ..... | ..... |
| Gorilla #1 | ..... | ..... | ..... | ..... | ..... |
| Gorilla #2 | ..... | ..... | ..... | ..... | ..... |
| Orang | ..... | P..... | L..... | K..... | DN... |
| | | | | | |
| Human X69819 | WAAFNLSNVT | GNSRILCSVY | CNGSQITGSS | NITVYGLPER | VELAPLPPWQ |
| Human #4 | ..... | ..... | ..... | ..... | ..... |
| Human #5 | ..... | ..... | ..... | ..... | ..... |
| Human #7 | ..... | ..... | ..... | ..... | ..... |
| Human S50015 | ..... | ..... | ..... | ..... | ..... |
| Chimp #3 | ..... | ..... | ..... | R.... | ..... |
| Chimp #4 | ..... | ..... | ..... | R.... | ..... |
| Chimp #5 | ..... | ..... | ..... | R.... | ..... |
| Gorilla #1 | ..... | ..... | ..... | R.... | ..... |
| Gorilla #2 | ..... | ..... | ..... | R.... | ..... |
| Orang | ...Y.... | ..... | I.... | R.... | L... |
| | | | | | |
| Human X69819 | PVGQNFTLRC | QVEGGSPRTS | LTVVLLRWEE | ELSRQPRAVEE | PAEVATATVLA |
| Human #4 | ..... | ..... | ..... | ..... | ..... |
| Human #5 | ..... | ..... | ..... | ..... | ..... |
| Human #7 | ..... | ..... | ..... | ..... | ..... |
| Human S50015 | ..... | ..... | ..... | ..... | ..... |
| Chimp #3 | Q.... | ..... | ..... | ..... | ..... |
| Chimp #4 | Q.... | ..... | ..... | ..... | ..... |
| Chimp #5 | R.... | ..... | ..... | ..... | P... |
| Gorilla #1 | ..... | ..... | ..... | ..... | P... |
| Gorilla #2 | ..... | ..... | ..... | ..... | ..... |

(SEQ ID NO:8)

Fig. 7A

| | | | | | |
|--------------|-------------|------------|-------------|------------|------------|
| Human X69819 | SRDDHGAPFS | CRTELDMQPQ | GLGLFVNNTSA | PRQLRTFVLP | VTPPRLVAPR |
| Human #4 | ..... | ..... | ..... | ..... | ..... |
| Human #5 | ..... | ..... | ..... | ..... | ..... |
| Human #7 | ..... | ..... | ..... | ..... | ..... |
| Human S50015 | ..... | ..... | ..... | ..... | ..... |
| Chimp #3 | ..... | ..... | ..... | ..... | ..... |
| Chimp #4 | ..... | ..... | ..... | ..... | ..... |
| Chimp #5 | ..... | ..... | ..... | ..... | ..... |
| Gorilla #1 | .G..... | ..... | ..... | ..... | M..... |
| Gorilla #2 | .G..... | ..... | ..... | ..... | M...S.... |
| Orang | .GH...H.. | ..... | ..... | ..... | ..... |
| | | | | | |
| Human X69819 | FLEVETSWPV | DCTLDGLFPA | SEAQVYLALG | DQMLNATVMN | HGDTLTATAT |
| Human #4 | ..... | ..... | ..... | ..... | ..... |
| Human #5 | ..... | ..... | ..... | ..... | ..... |
| Human #7 | ..... | ..... | ..... | ..... | ..... |
| Human S50015 | ..... | ..... | ..... | ..... | ..... |
| Chimp #3 | ..... | ..... | ..... | ..... | ..... |
| Chimp #4 | ..... | ..... | ..... | ..... | ..... |
| Chimp #5 | ..... | ..... | ..... | ..... | ..... |
| Gorilla #1 | ..... | ..... | ..... | ..... | ..... |
| Gorilla #2 | ..... | ..... | ..... | ..... | ..... |
| Orang | .A..... | ..... | ..... | .....V. | ..... |
| | | | | | |
| Human X69819 | ATARADQEAGA | REIVCNVTLG | GERREARENL | TVFSFLGPIV | NLSEPTAHEG |
| Human #4 | ..... | ..... | ..... | ..... | ..... |
| Human #5 | ..... | ..... | ..... | ..... | ..... |
| Human #7 | ..... | ..... | ..... | ..... | ..... |
| Human S50015 | ..... | ..... | ..... | ..... | ..... |
| Chimp #3 | ..... | ..... | ..... | .....T. |P.. |

Fig. 7B

| | | | | | | | |
|--------------|-------------|------------|------------|------------|------------|--------|-------|
| Chimp #4 | ..... | ..... | ..... | ..... | T. | ..... | P.. |
| Chimp #5 | ..... | ..... | ..... | ..... | T. | ..... | P.. |
| Gorilla #1 | ...L..... | ..... | ..... | I..... | ..... | ..... | P.. |
| Gorilla #2 | ...L..... | ..... | ..... | I..... | ..... | ..... | P.. |
| Orang | .M..... | Q..... | ..... | ..... | L | ..... | S.P.. |
| Human X69819 | STVTVSCMAG | ARVQVTLDGV | PAAAPGQPAQ | LQLNATESDD | GRSFFCSATL | ..... | ..... |
| Human #4 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human #5 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human #7 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human S50015 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Chimp #3 | ..... | ..... | ..... | ..... | ..... | R..... | ..... |
| Chimp #4 | ..... | ..... | ..... | ..... | ..... | R..... | ..... |
| Chimp #5 | ..... | ..... | ..... | ..... | ..... | R..... | ..... |
| Gorilla #1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Gorilla #2 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Orang | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human X69819 | EVDGEFLHHRN | SSVQLRVLYG | PKIDRATCPQ | HLWKDKTRH | VLQCQARGNP | ..... | ..... |
| Human #4 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human #5 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human #7 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human S50015 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Chimp #3 | ..... | ..... | ..... | ..... | T. | ..... | ..... |
| Chimp #4 | ..... | ..... | ..... | ..... | T. | ..... | ..... |
| Chimp #5 | ..... | ..... | ..... | ..... | T. | ..... | ..... |
| Gorilla #1 | ..... | ..... | ..... | ..... | T. | ..... | ..... |
| Gorilla #2 | ..... | ..... | ..... | ..... | T. | ..... | ..... |
| Orang |F.... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human X69819 | YPELRCLKEG | SSREVPVGIP | FFVNVTNGT | YQCQASSSRG | KYTLVVVMDI | ..... | ..... |
| Human #4 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human #5 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Human #7 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |

Fig. 7C

| | | | | | | |
|------------------|------------|-------------|------------|------------|------------|--------|
| Human S50015 | ..... | ..... | ..... | ..... | ..... | ..... |
| Chimp #3 | ..... | ..... | ..... | ..... | ..... | ..... |
| Chimp #4 | ..... | ..... | ..... | ..... | ..... | ..... |
| Chimp #5 | ..... | ..... | ..... | ..... | ..... | ..... |
| Gorilla #1 | ..... | ..... | ..... | ..... | ..... | ..... |
| Gorilla #2 | ..... | ..... | ..... | ..... | ..... | ..... |
| Orang | H..... | ..... | ..... | ..... | ..... | R..... |
| Human X69819 | EAGSSHFVPV | FVAVLLTLGV | VTIVLALMYV | FREHQRSGSY | HVREESTYLP | |
| Human #4 | ..... | ..... | ..... | ..... | ..... | ..... |
| Human #5 | ..... | ..... | ..... | ..... | ..... | T..... |
| Human #7 | ..... | ..... | ..... | ..... | ..... | ..... |
| Human S50015 | ..... | ..... | ..... | ..... | ..... | ..... |
| Chimp #3 | ..... | ..... | ..... | ..... | K..... | ..... |
| Chimp #4 | ..... | ..... | ..... | ..... | K..... | ..... |
| Chimp #5 | ..... | ..... | ..... | ..... | K..... | ..... |
| Gorilla #1 | ..... | ..... | ..... | ..... | K..... | ..... |
| Gorilla #2 | ..... | ..... | ..... | ..... | K..... | ..... |
| Orang | ...N....L. | .L....V.... | .V.V.... | ...K...R. | ...Q...S.. | |
| Human X69819 | LTSMQPTEAM | GEEPSRAE | | | | |
| Human #4 | ..... | ..... |  |  |  |  |
| Human #5 | ..... | ..... |  |  |  |  |
| Human #7 | ..... | ..... |  |  |  |  |
| Human S50015 | ..... | ..... |  |  |  |  |
| Chimp #3 | ..... | Q.. | ..... |  |  |  |
| Chimp #4 | ..... | Q.. | ..... |  |  |  |
| Chimp #5 | ..... | ..... | ..... |  |  |  |
| Gorilla #1 | ..... | ..... | ..... |  |  |  |
| Gorilla #2 | ..... | ..... | ..... |  |  |  |
| Orang | ..... | .....T.. | | | | |

Fig. 7D

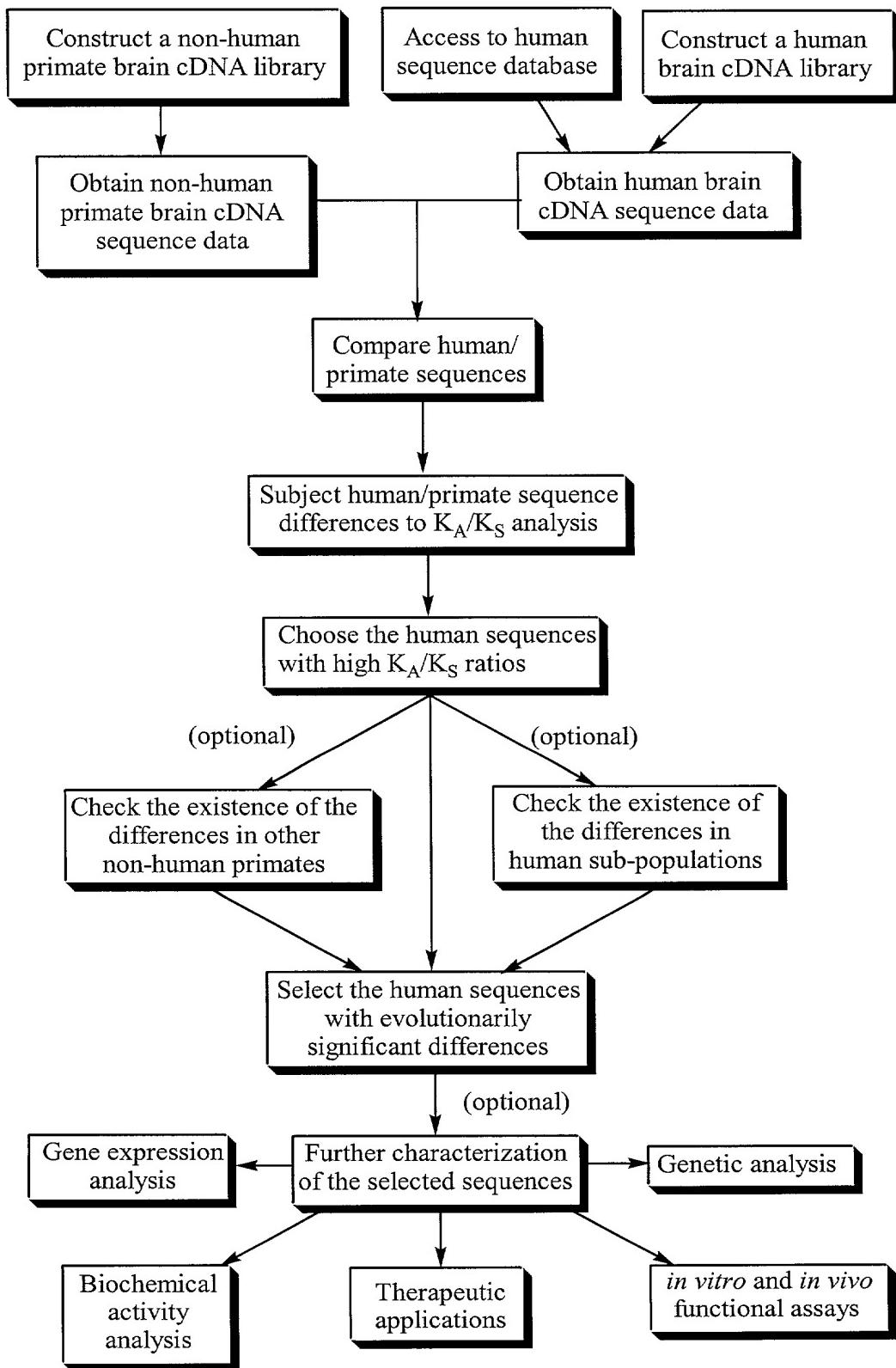


Fig. 8

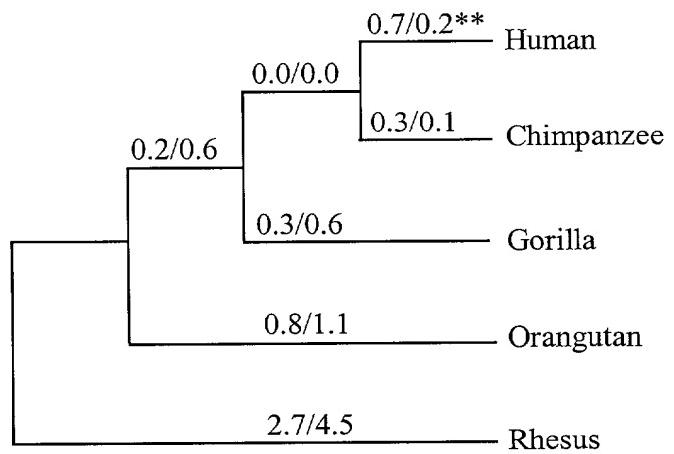


Fig. 9

098422520 • 083601

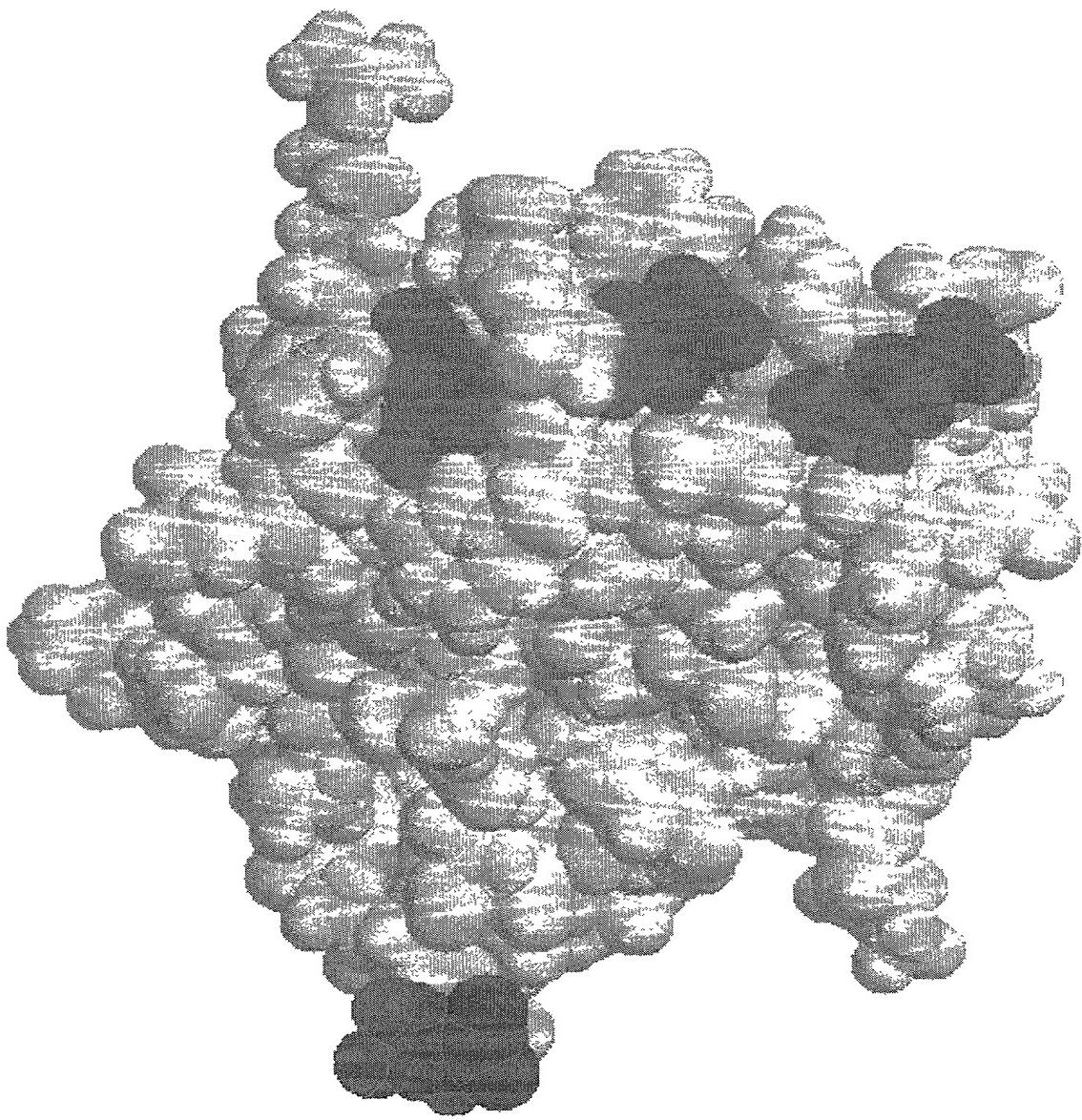


Fig. 10

FOEB0 "2524660

Human

ATGAGTGAECTCCAAGGAACCAAGACTGCAGCAGCTGGCTCCCTGGAGGAGAACAA
GCTGAGAGGGCCTGGATTCCGACAGACTCGAGGATAACAAGAGCTTAAGCAGGGTGTCT
TTGGCCATGGTCCCCCTGGTGTGCAAACCTCCTCCCTTCACGCTCTGGCTGGCTCCCT
TGTCCTAAGGTCCCAGCTCCATAAGTCAGGAACAAATCCAGGCAAGGAG
CGATCTACCAGAACCTGACCCAGCTTAAGGTGCAGTGGGTGAGGCTCTCAGAGAAA
TCCAAGGTGCAGGAGATCTACCAGGAGCTGACCCAGCTGAAGGGCTGCAGTGGGTGA
GCTTCCAGAGAAATCTAAGGTGCAGGAGATCTACCAGGAGCTGACCCGGCTGAAGG
CTGCAGTGGTGAGCTTCAGAGAAATCTAAGCTGCAGGAGATCTACCAGGAGCTG
ACCTGGCTGAAGGGCTGCAGTGGGTGAGGCTCTCAGAGAAATCTAAGATGCAGGAGAT
CTTACCAAGGAGCTGACTCGGCTGCAAGGGCTGCAAGTGGGTGAGCTCCAGAGAAATCTA
AGCAGCAGGAGATCTACCAGGAGCTGACCCGGCTGAAGGGCTGACCCGGCTGAAGGGCTGC
CCAGAGAAATCTAAGCAGCAGGAGATCTACCAGGAGCTGACCCGGCTGAAGGGCTGC
AGTGGGTGAGCTCCAGAGAAATCTAAGCAGCAGGAGATCTACCAGGAGCTGACCC
CAGCTGAAGGGCTGCAGTGGAACGCCCTGTGCCACCCCTGTGGAAATGGACATT
CTTCCCAAGGAACCTGTTACTCTCATGTCTAACTCCCAGGGAAACTGGCACGACTCCAT
CACCGCCCTGCAAAGAAGTGGGGCCAGCTCGTCGAATCCTAAAGTGCTGAGGAGC
AGAACTCCCTACAGCTGCAGTCTCCAGAAGTAACCCGGCTCACCTCTGGCC
CAGATCTAAATCAGGAAGGGCACCTGGCAATGGGTGGACGGCTCACCTCTGGCC
AGCTCAAGCAGTATTGGAAACAGAGGAGAGCCAAACAACGTTGGGGAGGAAGACTG
CGCGGAATTAGTGGCAAATGGCTGGAAACGACGACAATGTAATCTGCCAATTCTG
GATCTGCCAAAAAGTCCGAGGCCCTCTGCTCCAGGGATGAAGAACAGTTCTTCTCC
AGCCCTGCCACCCCCAAACCCCCA (SEQ. ID. NO. 9)

Fig. 11

Chimpanzee

ATGAGTGACTCCAAGGAACCAAGACTGCAGCAGCTGGCCCTCCTGGAGGAGAAACA
GCTGAGAGGCCCTGGATTCCGACAGACTCGAGGCTACAAGAGCTTAGCAGGGTGTGTC
TTGGCCATGGTCCCCCTGGTGTGCAACTCCTCTCACGCTCTGGCTGGCTCCCT
TGTCCAAGGTCCAAGGGTCCCCCAGCTCCATAAGTCAGGAAGAATCCAGGGCAAAGACC
TGATCTACCCAGAACCTGACCCAGCTAAAGCTGCAGTGGTGAAGCTCTCAGAGAAA
TCCAAGCTGCAGGAGATCTACCCAGGAGCTGACCCAGCTGAAGGGCTGCACTGGGTGA
GCTTCCAGAGAAATCTTAAGCAGCAGGAGATCTACCCAGGAGCTGACCCGGCTGAAAGG
CTGCAAGTGGGTGAGCTTCCAGAGAAATCTTAAGATGCAGGAGATCTACCCAGGAGCTG
ACTCGGCTGAAGGCTGCACTGGTGAAGCTTCCAGAGAAATCTAAGATGCAGGAGAT
CTACCCAGGAGCTGACTCGGCTGAAGGGCTGCACTGGTGAAGCTGCAGTGGGTGAGCTT
AGCAGCAGGAGATCTACCCAGGAGCTGACCCAGGAGCTGACCCAGCTGACCCGGCTGC
CCAGAGAAATCTAAGCAGCAGGAGATCTACCCAGGAGCTGACCCAGGAGCTGACCCGGCTGC
AGTGGGTGAGCTCCAGAGAAATCTAAGCAGCAGGAGATCTACCCAGGAGCTGACCCGGCTGC
CGGCTGAAGGGCTGCAGTGGAAACGCCCTGTGCCCGCTGCCCTGGGAATGGGACATT
CTTCACAAGGAAACTGTTACTTCATGTCTAACTCCCCAGCGGAACCTGGCAGACTCCAT
CACTGCCTGCAAAAGGAAGTGGGGCCAGCTCGTGTAAATCAAAAGTGCTGAGGAGC
AGAACTTCCTACAGGCTGCAGTCCAGAAGTAACCCCTCACCTGGATGGGACTTT
CAGATCTAAATGAGGAAGGCCATGTGGCAATGGGTGGACGGCTCACCTCTGGTGC
AGCTTCACACAGTAYTGGAAACAGAGGAGGCCAACAAACGTTGGGAGGAAGACTG
CGCGGAATTAGTGGCAATGGCTGGAAATGTAATCTTGCCAAATTCT
GATCTGCAAAAGTCCGGCAGCCTGGTCCAGGGATGAAAGAACAGTTCTCTCC
AGCCCCTGCACCCAAACCCCCCTCTGCG (SEQ. ID. NO. 10)

Fig. 12

Gorilla

ATGAGTGACTCCAAGGAACCAAGACTGCAGCAGCTGGCCCTCTGGAGGGAAACA
 GCTGAGAGGGCCTGGATTCCCACAGACTCGAGGCTAACAGAGCTTAGCAGGGTGTGTC
 TTGGCCATGGTCCCCCTGGTGTGCAACTCCTCTCAGGCTCTGGCTGGCTCCCT
 TGTCCAAGTGTCACAGGTTCCATAAGTCAGGAACATACTCCAGGCAAGACG
 CGATCTACCCAGAACCTGACCCAGTTAAAGCTGCAGTGGTGAGCTCAGAGAAA
 TCCAAGCTGCAGGGAGATCTATCAGGAGCTGACCCAGCTGAAGGCTGCAGTGGGTGA
 GTTCCAGAGAAATCTAACGCCAGGAGATCTACCAGGAGCTGAGCCAGCTGAAGG
 CTGCAAGTGGGTGAGCTTCCAGAGAAATCTAACGCCAGGAGATCTACCAGGAGCTG
 ACCCGGCTGAAGGGCTGCAGTGGTGAGCTTCCAGAGAAATCTAACGCCAGGAGAT
 CTACCAGGGAGCTGACCCGGCTGAAGGGCTGCAGTGGGTGAGCTCCAGAGAAATCTA
 AGCAGCAGGAGATCTACCAGGGAGCTGAGCCAGGAGATCTACCAGGAGCTGAGCTGC
 CCAGAGAAATCTAACGCCAGGAGATCTAACGCCAGGAGATCTACCAGGAGCTGAGCTGC
 AGTGGGTGAGCTCCAGAGAAATCTAACGCCAGGAGATCTACCAGGAGCTGAGCTGC
 CAGCTGAAGGGCTGCAGTGGAACGCCCTGTGCCGGCTGCCCTGGGAATGGACATT
 CTRCCAAGGAAACTCTAAGTCTAACCTCCAGGGAAACTGGCACGACTCCAT
 CACCGCCCTGCCAAGGAAGTGGGGCCAGCTCGTGTAAATCAAAGTGGCTGAGGAGC
 AGAAACTCCCTACAGGCTGCAGTCCAGAAGTAACCCGCTCACCTGGATGGGACTT
 CAGATCTAAATCATGAGGCACTGGCAATGGGTGGACGGCTCACCTCTGGCC
 AGCTTCGAGCAGTATTGGAAACAGAGGAGGCCAACAAACGTTGGGAGGAAGACTG
 CGCGGAATTAGTGGCAATGGCTGGAACGATGACAAATGTAATCTGGCCAAATCTG
 AGCCTCTGCACCCAAACCCCCCTCTGCG (SEQ. ID. NO. 11)

Fig. 13

1 ctccagacacct acccagaaaag atgcccggat ggatcctgca gctccgtggc ttttctgggc
61 agcagcggcc cctgctctca agagaccctg gtcctgtatg gtggcccaa gggttgcacgc
121 tggtgctagg gactcaggac agtttcccgaaaaggccaa gccccggcagcc cctccagggg
181 ccgggtgagg aagctgggggtgcccggagc cacactgggt ccctgaaccc cctgcttggt
241 tacagtgcag ctcctcaagt ccacagacgt gggccggcac agcctcctgt acctgaagga
301 aatcgccgt ggctggttcg gaaagggttt cctggggag gtgaactctg gcatcagcag
361 tgcccaggt gtggtaaagg agctgcagc tagtgcacgt gtgcaggagc agatgcgtt
421 cctggaggag gtgcagccct acaggccct gaagcacagc aacctgctcc agtgcctggc
481 ccagtgcgcc gaggtgacgc cttacctgt ggtgatggag ttctgcccac tgggggacact
541 caagggtctac ctgcggagct gccgggtggc ggagtccatg gctcccggacc cccggaccct
601 gcagcgcatt gcctgtgagg tggctgtgg cgtcctgcac cttcatcgca acaatttcgt
661 gacagcgcac ctggccctgc gaaactgcct gtcacggct gacctgacgg tgaagattgg
721 tgactatggc ctggctcaact gcaagtagacag agaggactac ttctgtactg ccgaccagct
781 gtgggtgcct ctgcgttgcg tcgcgcaga gctgtggac gaggtgcata gcaacactgt
841 cgtcgtggac cagaccaaga gggggatgt gtggccctg ggcgtgacca tctgggagct
901 ctttgagctg ggcacgcagc octatccccca gcaactcgac cagcagggtgc tggcttacac
961 ggtccgggag cagcagctca agtgcggccaa gccccagctg cagctgaccc tgcggaccc
1021 ctggtacgag gtgatgcgt tctgctggat gcagcccgag cagcggccca cagccggagga
1081 ggtgcacctg ctgctgtcct acctgtgtgc caaggccgccc accgaagcag aggaggaggt
1141 tgaacggcgc tggcgctctc tgcggccccc cggggggggc gtggggcccg ggccgggtgc
1201 ggcggggccc atgctggcg gctgtggtaa gctcggccgt gcctctgttct tccgctgt
1261 ggagcagttc gcggggcagc gcttccacgc ggacggcgc gacgtgtga cggtgaccga
1321 gaccagccga ggcctcaatt ttgagttaca gttggggggcg ggccgcggcg cggaggccct
1381 cccggccacg ctgagccctg gccgcaccgc acgcctgcag gagctgtgcg ccccccacgg
1441 cgcgcccccg ggctgtgttc cgggtctca ggcgcacagc ccgtcgctgg gcagcgagta
1501 cttcatccgc ctagaggagg cgcacccgc cgcggccac gaccctgact ggcggccgt
1561 cgcccccaact ccacctgcca cgcggacca ggacgcacgc tctgacgcga gcacccgcgc
1621 ctgcgtggcc atggagccgc tgctggccca cggggccaccc gtcgacgtcc cctggggccg
1681 cggcgaccac taccctcgca gaagcttggc gctggaccccg ctctgcccct cacgctctcc
1741 ctgcggctcg gcggggcccc ttgagttctggc ggagggagga gctggaggatg cagactgggg
1801 cgtggccggc ttctgtcctg ctttcttgcga ggaccactg ggcacgtccc ctttggggag
1861 ctcagggcgc ccccccgtc cgtactgg cgaggatgag ctagaggagg tggagcgcgc
1921 gagggccggc cagcgcggc actggcgatc caacgtgtca gccaacaaca acagcggcag
1981 ccgctgtcca gagtcctggg accccgtatc tgccggctgc cacgctgagg gctggccct
2041 tccaaagcag accccacggg cttttttccga gcccgggtac cttggagagc ctctgttgg
2101 gctccaggca gcctctggcc aggagccagg ctgctggccc ggcctccctc atctatgtc
2161 tgcccaggcc ctggcacctg ctccctgcct gtttacaccc tcctggacag agacagccag
2221 tagtgggggtt gaccacccgc aggcaagagcc caagtttgc acggaggctg agggcaactac
2281 cggacccgc ctggcccttc cttccgtccc cttccatcc caggaggag cccacttcc
2341 ctcggaggag gccagtgcctt ccgcacggcc ttatggccctg cttttttccgc acatccgc
2401 tactggtgcg gaggtgtctg ccatcaagct ggcttctgtcc ctgaatggca gcagcagtc
2461 tcccgaggtg gaggacccca gcagtggagga tgaggacacg gctggggccca cctcaggcat
2521 cttcaccgc acgttccagcg acggcctgca ggccaggagg cggatgtgg tgcagccct
2581 ccgctctcg cagaagcagg tggggacccc cgactccctg gactccctgg acatccgc
2641 ctcagccagt gatggtgctt atgaggttt cagccctgtcc gcccactggcc cctctggagg
2701 gcagccgcga ggcgtggaca gtggctatga caccggagaac tatgagtccc ctgagttgt
2761 gctcaaggag ggcggaggaag ggtgtggcc ccaggccctt gctggagctgg cctcaggagg
2821 tgagggccccc gggcccgaga cacggcttc caccccttc agtggcctca acgagaagaa
2881 tccctaccga gactctgcctt acttctcaga cctcggaggctt gaggccggagg ccacccctcagg
2941 cccagagaag aagtgcggcg gggaccggc ccccccggccca gagctggcc tgcggagcac
3001 tgggcagccg tctgagcagg tctgtctcag gcctgggggtt tccggggagg cacaaggctc

Figure 14A

卷之三

3061 tggccccggg gaggtgcgtc cccactgtc gcagttgaa gggtcctcc cagagccag
 3121 cacctgcccc tcgggcctgg tcccagagcc tccggagccc caaggccag ccaagggtcg
 3181 gcctgggcc agccccagct gtcggcattt ttcctgtc accccgggtc cgctgagatc
 3241 agaaggcaac agctctgagt tccagggggc cccaggactg ttgtcaggc cggccccaca
 3301 aaagcggatg gggggcccgag gcaccccccag agccccactc cgcctggc tgccggcct
 3361 ccctgcggcc ttggagggcc ggccggagga ggaggaggag gacagtgagg acagcgacga
 3421 gtctgacgag gagctcccgct gtcacagcgt ccaggagcct agcgaggaca gcbaagagga
 3481 ggccgcggcg gtgcggctgg tgggtggctga gagccagagc ggcgcgaacc tgccgacgc
 3541 gtcggatg cccagctgc tggccggagac cttctgcgag gacctggaa gcaagaagaa
 3601 ggccgtgtcc ttcttcgacg acgtcacccgt ctaccccttt gaccaggaaa gccccacccg
 3661 ggagctcggg gagcccttcc cggggcggccaa ggaatcgccc cctacgttcc ttagggggag
 3721 ccccggtctt cccagcgcccc ccaaccggcc gcaggaggct gatggctccc caaatggctc
 3781 cacagcggaa gagggtggtg ggttcggcgtg ggacgacgac tttccgctga tgacggccaa
 3841 ggcagccccc gccatggcccc tagaccggc cgcacccggcc cggctgcgc ccacgcccac
 3901 gcccgtccc ttctcgccgt tcacgggtgc gcccggccccc acgtcccgct tctccatcac
 3961 gcacgtgtct gactcggacg ccgagtcggaa gagaggaccc gaaagctggtg cgggggtgaa
 4021 gagtaaagag gctttagacc tgggcagcctc ctgccccctca aggctggcgt caccggagcc
 4081 cctggccaggc agcagcgcagg atggtgaccc agaaggtggg gaccacgtcc tggggctgt
 4141 tggcagcaga ttcaagggtgcc tctggcccccac ggggtgtcct ggagaagaccc gtgggatgag
 4201 aggccctggg tggtagatcg gccatgctcc gccccagagg cagaattcgt ctgggctttt
 4261 aggcttgctg ctagccccctg gggggcgcctg gagccacagt ggggtgtctgt acacacatac
 4321 acactaaaaa gggggccagtg cccctgggca cggggggcccc caccctctgc cctgcctgccc
 4381 tggcctcgga ggaccggcat gccccatccg gcagctctc cgggtgtgtc acaggacact
 4441 taaaccaggg cgaggcatgg ccccgagaca ctggcagggtt tggtagcctc ttcccaccccc
 4501 ctgtgcccccc acccttgccct ggttcctggt ggctcaggc aaggagttggc cctggggcc
 4561 cgtgtcggtc ctgttccgc tgccttatac tcaaagtccg tggctgttcc cccttcactg
 4621 actcagctag acccgtaagc ccacccttcc cacagggaaac aggctgtcc cacctgggtc
 4681 cccgtgtggc cacgggtggc agcccaaaag atcaggggtg gaggggcttc caggctgtac
 4741 tcctgcccccg tggggcccgat tctagaggtg cccttggcag gaccgtgcag gcagctcccc
 4801 tctgtggggc agtatctggt cctgtggccc agctgcggaa ggagagttggg ggcacatgccc
 4861 cgcagtcagt gttggggggc tccgtcctac agggagaggg atgggtgggg agggggtggag
 4921 ctgggggcaag ggcagcacag ggaatatttt tgtaactaac taactgtgt ggttggagcg
 4981 aatgaaaggatgggtgatttt aagttattgt tgccaaagag atgtaaagtt tattttgtct
 5041 tcgcaggggg attttttt ttttttgggtt gaggcttaga acgctgggtc aatgttttct
 5101 tqttcccttq ttttaaqag aatqaagct aaaaaaaaaag (SEQ ID NO: 14 and 15)

Figure 14A (continued)

MQFLEEVQPYRALKHSNLLQCLAQCAEVTPYLLVMFCPLGDLKGYLRSRVAESMAP
DPRTLQRMACEVACGVLHLHRNNFVHSDLALRNCLLTADLTVKIGDYGLAHCKYRED
YFVTADQLWVPLRWIAPELVDEVHSNLLVVDQTKSNGNVWSLGVTIWELFELGTQPYPQ
HSDQVLAYTVREQQLKLPQLQLTLSDRWYEVMQFCWLQPEQRPTAEEVHLLSYL
CAKGATEAEEEERRWRSLRGGGVGPGGAAGPMLGGVVELAAASSFPLLEQFAGD
GFHADGDDVLTVTETSRGLNFYEYKWEAGRGAEEAFPATLSPGRTARLQELCAPDGAPP
VVPVLSAHSPSLGSEYFIRLEEAAPAAGHDPCAGCAPSPPATADQDDDSDGSTAASLA
MEPLLGHGPPVDVPWGRGDHYPRRSLARDPLCPSRSPSAGPLSLAEGGAEDADWGV
AAFCPAFFEDPLGTSPLGSSGAPPLPTGEDELEEVGARRAAQRGHWRSNVSANNNSGS
RCPESWDPVSAGCHAEGCPSPKQTPRASPEPGYPEPLLGLQAASAQEPMCCPGLPHLC
AQGLAPAPCLVTPSWTETASSGGDHQPQAEPKLATEAEGTTGPRPLPSVPSPSQEGAPLP
SEEASAPDAPDALPDSPPTATGGEVSAIKLASALNGSSSPEVEAPSSEDEDTAATSGIFT
DTSSDGLQARRPDVVPAFRSLQKVGTQPDSDLSDLIPSSASDGGYEVFSPSATGPSGGQP
RALDSGYDTENYESPEFVLKEAQEGLCEPQAFQFAELASEGEGPETRLSTSGLNEKNPY
RDSAYFSDLEAEAEATSGPEKKCGGDRAPGPPELGLPSTGQPSEQVCLPGVSGEAQGSG
PGEVLPPLLQLEGSSPEPSTCPGLVPEPPEPQGPAKVRPGSPSCSFLLTPVPLRSEGN
SSEFQGPPGLLSGPAPQKRMGGPGTPRAPRLALPGLPAALEGRPEEEEDSEDSDESDE
ELRCYSVQEPSEDSEEAPAVPVVAESQSARNLRSLLKMPSSLSETFCEDLERKKAVS
FFDDVTVYLFDQESPTRELGEFPFGAKESPFTLRGSPGSPSAPNRPQQADGSPNGSTAEE
GGGFAWDDDFPLMTAKAAFAMALDPAAPAPAAPTPTPAPFSRFTVSPAFTSRSITHVS
DSDAESKRGEAGAGGESKEA (SEQ ID NO:16)

Figure 14B

GCTCCCTGCCCTGGTTACACCCCTCCTGGACAGAGACAGCCGGTAGTGGGGTGACCACCCGCAGGCAGAGCC
CAAGCTTGCACGGAGGCTGAGGGACTGCCGGACCTGTCTGCCCTTCCCGTCCCCTCCCCATCCC
AGGAGGGAGCCCCACTTCCCTCGGAGGAGGCCAGTGGCCCTGACGCCCTGATGCCCTGCCTGACTCTCCC
ATGCCTGCTACTGGTGGCGAGGTGTCTGCCATCAAGCTGGCTCTGTCTGAATGGCAGCAGCAGCTCTCC
CGAGGTTGAGGCACCCAGCAGCAGGATGAGGACACGGCTGAGGCCACCTCAGGCATCTCACCGACACGT
CCAGCGACGGCCTGCAGGCCAGAGGCTGGATGTTGCCAGCCTTCGCTCTGCAGAAGCAGGTGGGG
ACCCCCGACTCCCTGGACTCCCTGGACATCCCATCCTCAGCCAGTGTAGGTGGCTATGAGGTCTCAGCCC
GTCCGGCCTACTGGCCCCCTCTGGAGGGCAGCCCCGAGCAGCTGGACAGTGGCTATGACACCGAGAACTATGAGT
CCCCCTGAGTTGTCTCAAGGAGGCGCAGGAAGGGTGTGAGCCCCAGGCCCTTGAGGAGCTGGCCTCAGAG
GGTAGGGCCCCGGCCCCGGCCCGAGACGGCTCTCCACCTCCCTCAGTGGCCTCAACGAGAAGAATCC
CTACCGAGACTCTGCCTACTTCTCAGACCTGGAGGCTGAGGCCAGGCCACCTCAGGCCAGAGA
AGAAGTGGCGGGGGACCAAGCCCCCGGCCAGAGCTGGACCTGCCAGACTGGCAGCGTCTGAGCAG
GTCTCCCTCAGGCCCTGGGTTTCCGGGAGGCACAAGGCTCTGGCCCCGGGAGGTGCTGCCCTACTGCT
GCGGCTTGAAGGATCCTCCCCAGAGCCCAGCACCTGCCCTCGGCCCTGGTCCCAGAGCCTCCGGAGCCCC
AAGGCCAGCCGAGGTGCGGCTGGGCCAGCCCCAGCTGCTCCAGTTTCTGCTGACCCCGTTCCG
CTGAGATCAGAAGGCAACAGCTCTGAGTTCCAGGGCCCCCAGGACTGTGTCAGGGGGCCCCACAAAA
GCGGATGGGGGCCCTAGGCACCCCCAGAGCCCCACTCCGCCCTGGCTCTGCCCGGCCCTCTGCCCTTGG
AGGGCCGCCGGAGGAGGAGGAGGAGGACAGTGAGGACAGCCGGAGTCTGACGAGGAGCTCCGCTGCTAC
AGCGTCCAGGAGCCTAGCGAGGACAGCGAAGAGGAGGCGCCGGTGGCTGGTGGCTGAGAGCCA
GAGCGCGCAACCTCGCAGCCTGCTCAAGATGCCAGCCTGCTGCCAGGCTCTGCGAGGACCTGG
AACGCAAGAAGAAGGCCGTGCTTCTGACGACGTACCGCTACCTCTTGTACCGAGAAAGCCCCAC
TGGGAGCTGGGGAGCCCTCCCGGCCAAGGAATGCCCCCCACGTTCTTAGGGGGAGCCCCGGCTC
TCCCGCCCTAACCGGCCAGCAGGCTGATGGCTCCAAATGGCTCACAGCGGAAGAGGGTGGTG
GGTTCGCGTGGGACGACGACTCCCGCTGATGCCGCCAGGCAGCTCGCCATGCCCTAGACCCGGCC
GCACCCGCCCGGCTGCGCCACGCC*****GCTCCCTCTCGCGCTCACGGTGTGCCCCGGCCAC
GTCCACGTCCCGCTTCTCCATCACGACAGTGTCT (SEQ ID NO:17)

Figure 15A

GCTCCCTGCCCTGGTTACACCCCTCCTGGACAGAGACAGACGGTAGTGGGGGTGACCACCCGCAGGCAGAGCC
CAAGCTTGCCACGGAGGCTGAGGGCACTGCCGGACCCCGCCTGCCCCCTCCTCCGTCCCCTCCCCATCCC
AGGAGGGAGCCCCACTTCCCTGGAGGGCAGTGCCTCCGACGCCCTGATGCCCTGCCGTACTGCC
ACGCTGCTACTGGTGGCAGGGTGTCTGCCACCAAGCTGGCTTCCGCCCTGAATGGCAGCAGCAGCTCTCC
CGAGGTGGAGGCACCCAGCAGTGGAGGATGAGGACACGGCTGAGGCAACCTCAGGCATCTCACCGACACGT
CCAGCGACGGCCTGCAGGCCAGAGGCAGGATGTGGTGCAGCCTTCACTCTCTGCAGAAGCAGGTGGGG
ACCCCCGACTCCCTGGACTCCCTGGACATCCGTCTCAGCCAGTGTATGGTGGCTATGAGGTCTCAGCCC
GTCGGCCACGGGCCCCCTGGAGGGCAGCCCCGAGCGCTGGACAGTGGCTATGACACCGAGAACTATGAGT
CCCCCTGAGTTGTGCTCAAGGAGGCGCAGGAAGGGTGTGAGCCCCAGGCCTTGGAGCTGGCCTCAGAG
GGCGAGGGC*****CCCGGGCCCAGACGGCTCTCCACCTCCCTCAGTGGCCTCAACGAGAAGAATCC
CTACCGAGATTCTGCTACTTCTCAGACCTGGAGGCT*****GAGGCCAGGCTACCTCAGGCCAGAGA
AGAAGTGGTGGGGACCAAGCCCCCGGGCAGAGCTGGGCCCTGGCGAGCAGTGGCAGCGTCTGAGCAG
GTCTCCCTCAGTCTGGGTTCCGTGGAGGCACAAGGCTCTGGCCCCGGGAGGTGCTGCCCACTGCT
GCGGCTTGAAGGGTCTCCCAAGGCCAGCACCTGCCCTGGGCCCTGGTCCCAGAGCCTCCGGAGCCCC
AAGGCCAGCCAGGTGGGCCCTGGGCCAGCCCCAGCTGCTCCAGTTTCTGCTGACCCCGTTCCG
CTGAGATCAGAACAGCTGAGTTCCAGGGCCCCCAGGACTGTTGTCAGGGCCGGCCCCACAAAAA
GCGGATGGGGGCCAGGCACCCCCAGAGCCCCACACCGCCTGGCTCTGCCCGGCCCTGCGCTTGG
AGGGCCGCCGGAGGAGGAGGAGGAGGAGGACAGTGAGGACAGCAGCAGACTGAGGAGCTGCCGTCTAC
AGCGTCAGGAGGCTAGCGAGGACAGCGAAGAGGAGGAGGCGCCCGGGTGGCTGGTGGCTGAGAGCCA
GAGCGCGCAACCTCGCAGCCTGCTCAAGATGCCAGCCTGCTGCCAGGCTCTCGCAGGGACCTGG
AACGCAAGAACAGGCGTGTCTTCTGACGACGTACCGCTACCTCTTGACCGAGAACGCCAC
CGGGAGCTGGGGAGCCCTCCGGGCCAAGGAATGCCCCCCACGTTCTTAGGGGGAGCCCCGGCTC
TTCCAGGCCCAACCGGCCAGCAGGCTGATGGCTCCAAATGGCTCACAGCGGAAGAGGGTGGTG
GGTTCGCGTGGGACGACGACTCCCGCTGATGCCGCCAGGCAGCCTGCCATGCCCTAGACCCGGCC
GCACCCGCCCGGCTGCCACGCC*****GCTCCCTCTCGCCTCACGGTGTGCCCGGCCAC
GTCC: : : : : CGCTTCTCATCACGACAGTGTCT (SEQ ID NO:18)

Figure 15B